



The Conservation Strip

CONSERVING NATURAL RESOURCES FOR A BETTER ENVIRONMENT

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WHAT IS THE JOHN MARSHALL SWCD?

by: Catherine B. Waterhouse, Conservation Education Specialist

In 1935 Congress passed legislation to create Soil and Water Conservation Districts (SWCD). These Districts provide citizens the opportunity to be involved in issues pertaining to soil and water resources at a local level. Virginia's SWCDs are self-governed, political subdivisions of the Commonwealth that work cooperatively with federal, state and local agencies. SWCDs provide a critical connection between landowners and agencies to provide technical and financial assistance to protect natural resources.

In 1962, about 55,000 acres in the Cedar Run and Lee Districts of Fauquier County became a part of the Culpeper SWCD, and the entire county became part of the Culpeper SWCD in 1965. On May 10, 1966, the John Marshall Soil and Water Conservation District (JMSWCD) was formed, encompassing all of Fauquier County. The JMSWCD was one of the first single county Districts and the first to have incorporated towns as part of the District. The Mission of the JMSWCD is to provide leadership, technical assistance, information, and education to the citizens of Fauquier County in proper soil stewardship, agricultural methods, and water quality protection to ensure the wise use of the County's natural resources.

Among its many activities, the JMSWCD administers the Virginia Agricultural Best Management Practices (BMP) Cost Share Program. Supported with state and federal funds, this incentive program is designed to improve the quality of streams, rivers and other water bodies through the implementation of BMPs to prevent soil erosion and minimize the introduction of nutrients, sediments, and toxins into water bodies. During fiscal year 2002 (July 1, 2001-June 30, 2002) the JMSWCD

disbursed \$292,746.97 to twenty-six Potomac and eleven Rappahannock watershed landowners as cost-share reimbursement for the installation of BMPs. When requested by organizations, businesses and individuals, technical assistance and information is provided on watershed management and protection, wetlands, grazing management, animal waste control, and other related topics.

The JMSWCD is the Plan Review and Inspection Agency for the Fauquier County Erosion and Sediment Control (E&S) Program. This involves responding to citizen erosion and sediment control complaints and conducting E&S inspections for all residential, commercial and industrial development projects in Fauquier County (with the exception of the Town of Warrenton). The JMSWCD also attends the monthly Technical Review Committee meeting, conducted by the Department of Community Development, to discuss development projects currently under review. The objective of the E&S Program is to work with responsible project personnel to address potential and/or existing E&S problems before they become a major source of pollution. In fiscal year 2002, a total of 3,858 E&S inspections were conducted.

Education is a major focus of the JMSWCD. For the 2002 fiscal year, 337 conservation education programs for 5144 young children, students and adults were conducted. A variety of conservation programs are offered. These include Conservation Field Days, point and nonpoint source pollution, erosion and sediment control, water quality, pond ecology, soils,

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Meet JMSWCD Associate Director **Paul D. Cronin**

Paul D. Cronin joined the John Marshall SWCD's Board in 2002.

In the Spring of 2000, Mr. Cronin retired from Sweet Briar College (SBC), Sweet Briar, Virginia, after 34 years on the faculty, where he was Director of the Riding Program and Professor of Physical Education and Athletics. Before his retirement, he was honored with the establishment of the Paul D. Cronin Chair of Riding to commemorate 30 years of teaching at Sweet Briar College. In 1997 he was given the Educator of the Year Award by the Virginia Horse Council and was a Hall of Fame Inductee by the Southwest Virginia Hunter Jumper Association. He still works with various SBC committees to help preserve and farm the college's 3,000 acres.

Mr. Cronin and his wife, Ann (who recently retired from the Foreign Service) live in Rectortown with their four horses, and stay busy with various volunteer efforts. They enjoy the beautiful countryside, whether viewing it from a tractor, a horse, or an automobile.



Paul D. Cronin
Associate Director

Teacher's Corner

- In conjunction with "**Soil and Water Stewardship Week**", April 27-May 4, 2003, the JMSWCD is sponsoring a **poster contest** for **fourth grade students**. The theme for Stewardship Week and for the poster contest is "**Food for the Future**". For more information, posters and other materials, call Catherine at 347-3120, ext. 3.
- Will your class study soils, watersheds, water pollution or similar topics sometime during the school year? The JMSWCD has a variety of **classroom programs** and **activities** to supplement your conservation education curriculum, including an Enviroscape model, to help meet appropriate SOLs. To find out more, call 347-3120, ext. 3, and ask for Catherine.

Interesting Websites for Teachers:

- <http://outingclub.wlu.edu/guidebook/wildflowers> *Washington and Lee University*. Have students ever brought in flowers for you to identify? This website is extremely helpful since it breaks down the flowers according to species, color and common names. Check out this site the next time you're stumped!
- www.waite.aidelaide.edu.au/school/Soil/zoo.html *University of Adelaide*. Let Sally Smith take you on a virtual tour of the many different types of organisms that live in soil. Even though this is from Australia, the information can be used for soil worldwide. Be sure to visit this site.

EVENT CALENDAR

Master Gardener Horticulture Hotline. Call (540) 341-7950, ext. 19, for gardening questions, insect identification, disease identification, weed identification, etc. The hours are 9-3, Monday - Friday.

April 26 Spring Fling Gardening Extravaganza. Prince William Fairgrounds, Manassas, VA. Gardening demonstrations, plant sale, vendors. For more information, call Paige Thacker at (540) 341-7950, ext. 14.

May 17-18 Piedmont Small Farm Festival. Archwood Green Barns, The Plains, VA. The festival features family farms and their quality products. There will be a selection of plants and animals for sale, live music, food samples, educational displays and hands-on demonstrations. For more information, contact Peter Mitchell at (540) 349-5314.

June 27- July 1 2003 4-H Horse Camp. Northern Virginia 4-H Educational Center, Front Royal, VA. 4-H Horse Camp is offered to youths ages 9-13. Participants will gain necessary knowledge to help them better care for their horses as they become better riders. For more information, call the Northern Virginia 4-H Center at (540) 635-7171 or Fauquier County Extension at (540) 341-7950.

CONSERVATION PAYS IN MANY WAYS

by: Tom Turner, Conservation Specialist

The conservation of our natural resources is an integral part of the future of farming, and the rewards to both the farmer and the land are many. One of the most practical ways to conserve these important resources is through the use of Agricultural Best Management Practices (Ag BMPs). Ag BMPs are structural and management practices that reduce soil erosion and protect water quality while providing alternative methods of farming that make **CENTS**.

A good example would be the **grazing land protection practice**. To facilitate rotational grazing, this practice provides financial incentives in the form of cost share and tax credits to convert large grazing units to smaller pastures. Rotational grazing allows farmers to maximize forage yields by concentrating animals where forage production is high. Once an area is grazed down, the field divisions allow the livestock to be moved into pastures that have regenerated. By keeping the vegetation in good health, soil erosion is reduced and manure laden runoff is trapped. As part of this practice, all live streams within the grazing unit are fenced out to protect water quality and improve wildlife habitat. The fencing is often used to break the grazing unit into the smaller pastures. Furthermore, each pasture is provided with a source of fresh clean water. The fresh water reduces the intake of parasites and results in an overall healthier herd. By improving forage production and livestock weight gain, this practice pays farmers in the long run. Additionally, wildlife habitat is created along the stream corridor and the sensitive aquatic species within the stream are protected.

Farmers and rural landowners will be pleased to hear that there are still programs that provide financial incentives to implement agricultural BMPs despite the struggling economy.

Virginia Agricultural Best Management Practices Cost Share Program.

The VA Ag BMP Cost Share program provides cost share and tax credits for the implementation of 46 different BMPs. The diversity of practices within this program range from animal waste control facilities to

wetland restoration. Cost Share returns vary depending on the practice. Some are paid at a straight per acre rate while others are cost shared on a percentage basis up to 75 percent. The most an individual can receive in a program year is \$50,000, but this amount may vary depending on the amount of funding in the program for that year.

USDA-Conservation Reserve Enhancement Program

The CREP program is an exceptional conservation program which combines state funding with existing federal program funding to reestablish forested streamside buffers in agricultural land. CREPs' exceptional financial returns stem from its ability to offer cost share, tax credits, rental payments for the reforested areas, signing incentive payments and practice incentive payments, as well as an optional easement payment for contract acres.

For more information on these and other programs contact Tom Turner at the John Marshall SWCD at (540) 347-3120, extension 3. You can also go to the Department of Conservation and Recreation's website at www.dcr.state.va.us/sw/costshar.htm.



Amy Rhodes, from Mrs. Lathrop's 4th block biology class, performs monthly water quality tests at the Fauquier Outdoor Lab's pond. The tests are a long-term, hands-on study of the ecology of the pond, supported by a grant from the Virginia Environmental Endowment.

WEST NILE VIRUS

West Nile Virus (WNV) appears to be well established in the United States and continues to spread. As of February 28, 2003, 4071 human cases of WNV, including 274 deaths, have been reported. In Virginia, there have been 29 confirmed human cases and two deaths (one in Sterling and one in Falls Church). It's only a matter of time before a confirmed human case shows up in Fauquier County. Nineteen horses with WNV were documented in Fauquier County; of those nineteen horses, five were either euthanized or died. The following information will answer some questions about WNV:

What is West Nile Virus? WNV is an infection spread by the bite of infected mosquitoes, usually causing no symptoms or a mild illness. However, encephalitis (inflammation of the brain) or meningitis (inflammation of the lining of the brain and spinal cord) may result. The virus is named after the West Nile region of Uganda, where the virus was first isolated in 1937. The first major outbreak in the United States occurred in New York in 1999.

Who gets WNV? Anyone can get WNV if bitten by an infected mosquito. However, even in areas where transmission of WNV is known to occur, only a small percentage of mosquitoes are infected. Even if a person is bitten by an infected mosquito, the chance of developing severe illness is less than 1%. People who are over age 50 are at greater risk.

How is WNV spread? WNV is spread by infected mosquitoes. A mosquito is infected by biting a bird that carries the virus. In this area, the northern house mosquito (*Culex pipiens*) is the primary vector of the disease.

Should I be tested for WNV if a mosquito has bitten me? No, most mosquitoes are not infected with WNV. See a physician if you develop the symptoms below.

What are the symptoms of WNV? Most healthy children and adults infected with WNV have no symptoms. If there are symptoms, they may be mild or serious. Mild illness includes fever and muscle aches, swollen lymph glands and sometimes a skin rash. In less than 1% of infected people, the disease may spread to the nervous system or bloodstream and cause sudden fever, intense headache, stiff neck and confusion, possibly resulting in encephalitis or meningitis.

How soon after exposure do symptoms appear?

The symptoms generally appear about 3-15 days after exposure, but may appear as soon as one day.

Does past infection with WNV make a person immune? Yes, a person who gets WNV probably cannot get it again.

What is the treatment for WNV? Is there a vaccine for WNV? There is no specific treatment. Supportive therapy will be used in more severe cases. Most people recover from this illness. There is no vaccine.

Can you get WNV by caring for an infected horse or other animals? WNV is transmitted by infected mosquitoes. There is no documented evidence of person-to-person or animal-to-person transmission.

How many types of animals have found to be infected with WNV? Although the vast majority of infections have mainly been identified in birds, WNV has also infected horses, dogs, cats, bats, chipmunks, skunks, squirrels and domestic rabbits.

How can WNV be prevented? Wide scale spraying has proven very costly and ineffective. Mosquitoes can breed in as little as one teaspoon of water. **Common sense precautions around the house** is the best way to control mosquito populations and protect against mosquito bites.

1. Wear loose, light-colored long-sleeved shirts and pants with closed shoes and socks.
2. If possible, stay indoors when mosquitoes are biting; this is usually at dawn and from dusk through the early evening.
3. Use insect repellent products with no more than 35% DEET for adults and less than 10% DEET for children.
4. Turn over or remove containers in your yard where water collects, such as old tires, potted plant trays, buckets, garbage can lids, canoes, wheelbarrows, and toys. Drill drainage holes in tires used for playground equipment.
5. Eliminate standing water on tarps or flat roofs.
6. Clean out birdbaths and wading pools every four days.
7. Clean roof gutters and downspout screens.

For more information, check these websites:

- www.cdc.gov/ncidod/dvbid/westnile/index.htm
- www.vdh.state.va.us/epi/wnv.htm
- <http://westnilevirus.nbii.gov>

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and bird conservation. Each year, the JMSWCD sponsors a fourth grade poster contest, conducts Virginia Save Our Streams trainings, sponsors students to attend Youth Conservation Camp, makes scholarship information available, conducts a tree seedling sale and offers free wildlife seed mix to citizens of Fauquier County. The Upper Rappahannock Watershed Stream Monitoring Program, a citizen-based volunteer program, and the Cedar Run and Marsh Run Monitoring Projects, student-based water monitoring programs, are coordinated by the JMSWCD

The JMSWCD Board consists of five Directors. Three are elected in a general public election and two are appointed by the Virginia Soil and Water Conservation Board. Of the appointed Directors, one is at large and the other is the local county extension agent. Required to take an oath of office, the Directors serve four-year terms, attend local and state meetings, and serve on committees. District Directors are not paid - they donate their time to help solve conservation problems. The JMSWCD Directors are Nic Kortlandt (chairman), Mary Lou Trimble (vice-chairman), Bob Tudor (secretary/treasurer), Keith Dickinson and Billy Frazier. Board meeting are held the second Wednesday of each month and are open to the public.

For more information about any of the JMSWCD programs, call (540) 347-3120, ext. 3, check out www.fauquiercounty.gov/government/departments/jmswcd or email questions to johnmarshall-swcd@va.nacdn.net.

Holiday Lake Forestry Camp

For over 50 years, **Holiday Lake Forestry Camp** has introduced young Virginians to the challenges, special skills and knowledge needed for managing forest resources which are used and enjoyed every day. The camp is designed for students who want to: explore and experience activities in forestry and wildlife related careers; participate in forestry and wildlife judging teams, Envirothon competitions or ecology clubs; and, have a special interest in *hands on* learning about natural resources. Classes are taught by professional foresters, wildlife biologists and conservation resource specialists. Located within the 20,000 acre Appomattox-Buckingham State Forest, the Camp is held at the Holiday Lake 4-H Education Center from June 19-24. The John Marshall SWCD sponsors **two** students to attend this camp each year. The registration deadline is April 19. Call the JMSWCD office at 347-3120, ext. 3, for more details.

Youth Conservation Camp

Each year the JMSWCD sponsors two students, grades 9-12, to **Youth Conservation Camp** held at Virginia Tech in Blacksburg. The camp explores a wide variety of topics such as: soils, water quality, forestry, wildlife, urban pollution issues, using new technology in resource management and marine biology. Other activities may include touring the Dairy Science Center, hiking and exploring a cave. The date for the camp is July 13-19 and applications must be into the JMSWCD by May 1. If you are interested, please call 347-3120, ext. 3, for further information.

The Conservation Strip is a quarterly publication of the JOHN MARSHALL SOIL AND WATER CONSERVATION DISTRICT, 98 Alexandria Pike, Suite 31, Warrenton, Virginia, 20186-2849.

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HOW CITIZENS CAN HELP THE E&S CONTROL PROGRAM

by: Christine Miller, E & S Specialist

Soil erosion is a natural process defined as the wearing away of the earth's surface by natural forces. The geologic rate of erosion dramatically increases when man interferes with the land. Accelerated erosion has a detrimental effect on the health of the Chesapeake Bay. Excessive sediment flow into the Bay increases nutrient loading, decreases the amount of sunlight to submerged aquatic vegetations, and interferes with the ability of gill-breathing organisms to survive. This, of course, upsets the delicate balance of aquatic life. For this reason, Virginia regulates erosion on construction sites by requiring certain erosion and sediment (E&S) controls to be implemented. The JMSWCD's E&S staff inspects construction sites in Fauquier County to make sure that controls are in place, are functional, and that sediment is not leaving the site. While our three person staff visits sites throughout the Fauquier County, we rely on concerned citizens to call in violations that we may not encounter on our daily travels. Citizen calls are greatly appreciated because they bring problems to our immediate attention, helping us do our job more effectively and efficiently.

As you drive through the county, watch out for the E&S violations listed below. Please note that violations associated with agricultural practices are exempt.

- Sediment tracked onto a paved or public road.
- Muddy water in any watercourse.
- Denuded land without visible E&S controls, or denuded land with E&S controls that are clearly failing.
- Drainage problems on or near construction sites.
- Stream banks that have been crossed by construction equipment without a temporary vehicular crossing.
- Eroding stream banks downstream of construction.
- Dust from a construction site.

If you notice one of the above, please call the John Marshall SWCD at (540) 347-3120, ext. 3, with the location and type of violation you observed. Together we can help keep Virginia's waters running clean.

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